

**GOVERNMENT OF THE DISTRICT OF COLUMBIA**  
Department of Energy and Environment

**FACT SHEET AND STATEMENT OF BASIS  
FOR PROPOSED PERMITTING ACTION  
UNDER 20 DCMR 300 (TITLE V-OPERATING PERMIT PROGRAM)**

This “Fact Sheet and Statement of Basis” has been prepared pursuant to 20 DCMR 303.1(c) and 40 CFR 70.7(a)(5).

**PERMIT NO. 030-I2**

**APPLICANT AND PERMITTEE:**

Fort Myer Construction Corporation  
2237 33rd Street, NE  
Washington, DC 20018

**FACILITY LOCATION:**

Fort Myer Construction Corporation Plant #2  
1155 W Street, NE  
Washington, DC 20018

**FACILITY DESCRIPTION:**

Fort Myer Construction Corporation operates two separate asphalt plants locations in the District of Columbia (Plant #1 and Plant #2) with both of them producing hot mix asphalt for the paving and construction industries. This permit is for Plant #2, located at 1155 W Street NE, Washington DC. The facility previously operated under Title V operating permit #30 but was closed, demolished, and reconstructed in 2008 and brand new equipment was installed. The plant was subsequently reopened in 2009 and began operation under Chapter 2 permit #6166. The Chapter 2 permit required that Fort Myer apply for a Title V permit within twelve months of the permit issuance.

The emission sources related to plant operation at this site consist of: a 95.63 million Btu per hour (MMBtu/hr) dual fuel fired burner; a 2.1 MMBtu/hr natural gas fired oil heater; a baghouse for operational emissions; various storage piles of rock and asphalt, incidental welding rod operations for repair of equipment and seven (7) aboveground fuel and asphalt production storage tanks associated with the production of paving asphaltic concrete. The Permittee is covered under Standard Industrial Classification (SIC) Code 2951.

This facility includes emission units that are capable of operating twenty-four (24) hours per day, seven (7) days per week, and fifty-two (52) weeks per year.

**Fact Sheet and Statement of Basis****Permit No. 30-I2****Fort Myer Construction Corporation Plant #2**

August 11, 2015

Page 2

**EMISSIONS SUMMARY:**

The following table provides a list of the estimated maximum emissions the facility could emit in a given 12-month period, under the terms of the permit and given the physical and operational design of the equipment at the facility.

<b>Plantwide Emissions Summary (tons per year)</b>	
<b>Pollutant</b>	<b>Potential Emissions</b>
Sulfur Dioxide (SO <sub>2</sub> )	36.24
Oxides of Nitrogen (NO <sub>x</sub> )	35.61
Total Suspended Particulate Matter (TSP)	20.00
Volatile Organic Compounds (VOCs)	26.79
Carbon Monoxide (CO)	148.86
Total Hazardous Air Pollutants (HAPs)	4.97

Note that the above data are based on revised calculations submitted on April 23, 2014 by the applicant's contractor (Wilcox Environmental Engineering) on behalf of the facility, as opposed to the initial submission in the Title V application revision dated November 2, 2010. The revised data used the maximum asphalt production of 325 tons per hour instead of the original 400 tons per hour. The source explained that FMCC is not capable of producing 400 tons per hour due to the moisture content of the raw materials. The source added that recordkeeping in their facility has shown that at no time since the start-up has the capacity of 325 tons per hour has been exceeded. Additionally, AQD modified the calculation to reflect the requested limit on annual production of 1,088,640 tons of asphalt, a requirement that has been placed in the permit.

Additionally, it should be noted that the NO<sub>x</sub> data is based on the average of the two highest stack test results while burning natural gas. Though only one test was performed using No. 2 fuel oil, stack testing indicated that NO<sub>x</sub> emissions are generally higher when burning natural gas at this plant than using fuel oil.

Also, the CO value above is based on the allowable limit in 20 DCMR 805 of 500 ppm CO at 3% oxygen. One stack test was failed for CO with a result of over 850 ppm, but this is not allowable. Testing will be required to show compliance with the 500 ppm limit.

The rest of the emission factors are based on a mixture of factors provided by the manufacturer of the equipment and AP-42 factors.

**BASIS OF 20 DCMR CHAPTER 3 (TITLE V) APPLICABILITY:**

This facility has the potential to emit 35.62 tons per year of NO<sub>x</sub> and 26.79 tons per year of VOCs. This exceeds the major source threshold in the District of 25 tons per year for each of

**Fact Sheet and Statement of Basis****Permit No. 30-I2****Fort Myer Construction Corporation Plant #2**

August 11, 2015

Page 3

these pollutants. Additionally, the facility has the potential to emit 148.86 tons per year of CO. This exceeds the major source threshold in the District of 100 tons per year of CO. As such, pursuant to 20 DCMR 300.1(a), the source is subject to Chapter 3 and must obtain an operating permit in accordance with that regulation and Title V of the federal Clean Air Act.

**LEGAL AND FACTUAL BASIS FOR DRAFT PERMIT CONDITIONS:**

The conditions contained in the Title V operating permit are based on underlying requirements of 20 DCMR as well as various federal regulations promulgated pursuant to the federal Clean Air Act. The regulations that are the basis of each condition are cited in the permit, except that conditions added to make another condition, with a direct underlying regulation, enforceable as a practical matter may, in some cases, not have a specific citation. These latter, un-cited conditions generally consist of monitoring, record keeping, and reporting requirements authorized under 20 DCMR 500.1.

The permit has been developed to incorporate the requirements of all applicable requirements as defined in 20 DCMR 399.1 along with additional conditions necessary to make all such requirements enforceable as a practical matter.

Any condition of the draft Title V Permit that is enforceable by the District but is not federally-enforceable is identified in the Title V permit as such with an asterisk.

It should also be noted that this permit will be issued to include updated requirements established pursuant to 20 DCMR Chapter 2. As such, it will be issued for public notice as a merged permit under the authority of both Chapters 2 and 3.

**REGULATORY REVIEW:**

This facility has been found to be subject to the requirements of the following regulations, except as noted in the discussion below:

**Federal and District Enforceable:**

- 20 DCMR Chapter 1 - General Rules
- 20 DCMR Chapter 2 - General and Non-Attainment Area Permits
- 20 DCMR Chapter 3 - Operating Permits and Acid Rain Programs
- 20 DCMR 500 - Records and reports
- 20 DCMR 502 - Sampling, tests, and measurements.
- 20 DCMR 600 - Fuel burning particulate emission.
- 20 DCMR 604 - Open Burning
- 20 DCMR 605 - Control of Fugitive Dust
- 20 DCMR 606 - Visible Emissions

## **Fact Sheet and Statement of Basis**

**Permit No. 30-I2**

**Fort Myer Construction Corporation Plant #2**

August 11, 2015

Page 4

20 DCMR 800 - Control of Asbestos

20 DCMR 801 - Sulfur Contents of Fuel Oils

20 DCMR 803 - Sulfur Process Emissions

20 DCMR 805 - Reasonably Available Control Technology for Major Stationary Sources of the Oxides of Nitrogen

40 CFR 60, Subpart I - Standards of Performance for Hot Mix Asphalt Facilities

40 CFR 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels

40 CFR 61.12 - Credible Evidence

40 CFR 64 - Compliance Assurance Monitoring (CAM)

### **District Enforceable Only:**

20 DCMR 402 - Chemical Accident Prevention

20 DCMR 900 - Engine idling.

20 DCMR 901 - Vehicular exhaust emissions.

20 DCMR 902 - Lead Content of Gasoline

20 DCMR 903 - Odorous or other nuisance air pollutants.

### **Chapter 2 Permits:**

Chapter 2 permit #6166 was issued in November 2009 to this facility after a reconstruction of the asphalt plant. The conditions of the Chapter 3 permit will supersede any previous Chapter 2 permit conditions.

Of particular note is a change in the allowable reclaimed (recycled) asphalt product (RAP) percent allowed to be processed in the equipment. The allowable percent is increasing from 20% to 50% by weight based on information the Department has received indicating that RAP use in this type of equipment generally only increases VOC emissions and likely decreases particulate matter emissions. Because there is no specific VOC emission limit, stack testing to show compliance with other pollutants at higher RAP levels would be of minimal additional assistance. Ft. Myer Construction Corporation has been notified, however, that if the increased RAP percentage results in odor violations resulting from VOC emissions, this condition may be revisited.

### **Chapter 6: Particulates**

One of the primary pollutants from an asphalt plant operation is particulate matter from the dryer. Also, fugitive dust from material handling or other industrial-type operation is frequent therefore Chapter 6 requirements are applicable. Associated emission limits are found in Conditions III(a)(1)(A), (E), (H) and (I). Operational limits are found in Conditions III(a)(2)(E) and (G).

### **Chapter 7: Volatile Organic Compounds and Hazardous Air Pollutants**

Chapter 7 requirements are not applicable to this facility as there are no applicable sections.

## **Fact Sheet and Statement of Basis**

**Permit No. 30-I2**

**Fort Myer Construction Corporation Plant #2**

August 11, 2015

Page 5

### **Chapter 8: Asbestos, Sulfur, Nitrogen Oxides, and Lead**

20 DCMR 801 is applicable. Use of fuel oil with a sulfur content of greater than 1% is prohibited. Permittee is committed to using natural gas as the primary fuel and low sulfur diesel fuel (500 ppm or less) as a back-up fuel. Therefore, Condition III(a)(2)(D) of the permit reflects that commitment.

20 DCMR 805.1(a)(3) is applicable because the facility is an asphaltic concrete plant with the potential to emit greater than 25 tons per year of NO<sub>x</sub>. This was derived using an annual production limit of 1,088,640 tons per year and a 325 ton per hour production rate.

20 DCMR 805.6(b) is applicable. The associated emission limits for NO<sub>x</sub> and CO have been included in Condition III(a)(1)(C) and (D) of the permit. The testing requirements are found in Condition III(a)(3)(K) and (L).

### **Greenhouse Gas (GHG) Requirements:**

Because Chapter 3 (Title V) was triggered by other pollutants, no evaluation was made to determine if the facility would trigger Title V applicability under the GHG Tailoring Rule. No modifications have been made to the source that would trigger PSD applicability under the GHG Tailoring Rule (which has been overturned by the courts in any case). Other than this requirement, there are no other applicable requirements related to GHGs at this time, therefore none were included in the permit.

### **40 CFR 60, Subpart I – Standards of Performance for Hot Mix Asphalt Facilities**

This regulation is applicable as this facility meets the definition of a hot mix asphalt facility and it commenced construction or modification after June 11, 1973. The 0.03 gr/dscf emission limit has been streamlined with that of 20 DCMR 603.1 and can be found in Condition III(a)(1)(A)(ii) of the permit. The 20% opacity limit can be found in Condition III(a)(1)(F). The Permittee requested that the Method 9 test be done while the burner fires natural gas instead of #2 fuel oil citing that the source seldom uses #2 fuel oil in actual operation. The permit has therefore been worded to allow the source to test with fuel oil every other year and test with natural gas in alternating fashion. See Condition III(a)(3)(O).

Testing requirements required by this subpart and the referenced 40 CFR 60.8 can be found in Condition III(a)(3)(J).

### **40 CFR 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984**

Per 40 CFR 60.110b(b), this subpart is applicable to storage vessels with a capacity greater than or equal to 75 m<sup>3</sup> but less than 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure less than 15.0 kPa. The volume of the fuel tank is 20,000 gallons, or 75.7 m<sup>3</sup>. Per AP-42, the true

**Fact Sheet and Statement of Basis**

**Permit No. 30-I2**

**Fort Myer Construction Corporation Plant #2**

August 11, 2015

Page 6

vapor pressure (TVP) at 80°F of distillate fuel oil No. 2 is 0.012 psi (0.083 kPa). Thus, this subpart is not applicable.

**40 CFR Parts 61 and 63 – National Emission Standards for Hazardous Air Pollutants (NESHAPs)**

There are no Part 61 or 63 NESHAPs applicable to this facility.

**40 CFR 64 – Compliance Assurance Monitoring (CAM)**

The requirement of 40 CFR 64, the Compliance Assurance Monitoring (CAM) Plan is applicable to this facility because the asphalt plant cannot achieve compliance without the use of the control device (the baghouse) for compliance. A CAM plan was submitted by the Permittee and has been incorporated as part of the permit under Conditions III(b) with some modifications to harmonize the plan with the requirements in the rest of the permit.

**COMMENT PERIOD:**

Beginning Date: August 21, 2015

Ending Date: September 21, 2015

All written comments should be addressed to the following individual and office:

Stephen S. Ours, P.E.  
Chief, Permitting Branch  
Department of Energy and Environment  
Air Quality Division  
1200 First Street, NE, 5<sup>th</sup> Floor  
Washington, DC 20002

**PROCEDURE FOR REQUESTING PUBLIC HEARING:**

During the public comment period any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The District shall grant such a request if it is deemed appropriate. The venue, date, and time for any public hearing shall be announced in the District Register and a daily newspaper.

**Fact Sheet and Statement of Basis**

**Permit No. 30-I2**

**Fort Myer Construction Corporation Plant #2**

August 11, 2015

Page 7

**POINT OF CONTACT FOR INQUIRIES:**

Olivia Achuko  
Environmental Engineer  
Department of Energy and Environment  
Air Quality Division  
1200 First Street, NE, 5<sup>th</sup> Floor  
Washington, DC 20002  
(202) 535-2997

**REVIEWS:**

Prepared by:



Olivia Achuko  
Environmental Engineer  
Air Quality Division

SSO:OA

Approved by:



Stephen S. Ours, P.E.  
Chief, Permitting Branch  
Air Quality Division

